

A0039F7

DR. SUSAN SHOTT, Ph.D. MAY 2, 2006

1 Q So you have not looked at that factor in terms of your  
2 report. You did not consider whether Mr. Allen's treatment would  
3 have involved a more difficult or an easier surgery?  
4 A That's correct.  
5 Q Do you know whether Mr. Allen had more than one  
6 aneurysm?  
7 A Not as I sit here today. I may have known in the  
8 process of reviewing the medical records, but I do not recall.  
9 Q Is that something that you might have known from the CT  
10 scan?  
11 A Possibly, yes.  
12 Q But you don't know as you sit here today?  
13 A That is correct.  
14 Q And did you include anything about the number of  
15 aneurysms as a factor in your report?  
16 A No.  
17 Q Does it matter if Mr. Allen had more than one aneurysm,  
18 would that matter for purposes of your analysis?  
19 MS. MCREADY: Well, if the Government has got evidence  
20 of how many aneurysms Mr. Allen had, I hope that they include  
21 that, because these questions are assuming that there is some  
22 knowledge about the number of aneurysms and I certainly haven't  
23 been given any discovery on that issue. And if there is  
24 something that you guys know that I don't know, I hope that you  
25 are going to fill me in.

Page 78

1 MR. GUARINO: We don't know anything about aneurysms  
2 other than statistics. It is not my burden of proof to prove  
3 what he had or didn't have. I'm simply asking questions about  
4 possible statistical results that might apply.  
5 BY MR. GUARINO:  
6 Q But leaving that aside, did you understand the  
7 question, Dr. Shott?  
8 A Yes.  
9 Q Did you make any assumptions as to whether Mr. Allen  
10 had more than one aneurysm?  
11 A No.  
12 Q Would it matter if he had more than one aneurysm?  
13 A Only if I found a sound research study which said after  
14 we take into account the most predictive factor condition on  
15 admission, this other thing matters.  
16 Q And I may be belaboring this, but I want to make sure I  
17 cover all the points that I need to cover to make sure I am not  
18 making an incorrect assumption. So I apologize that this is  
19 taking a little longer. I want to cover all the points.  
20 Did you take into the account or do you know  
21 anything about the shape of the aneurysms that Mr. Allen  
22 has, assuming that he had an aneurysm?  
23 A Not as I sit here today, no.  
24 Q Would the shape of the aneurysm have any affect on the  
25 incident of rebleeding?

Page 79

1 A That I don't know offhand. And that is, as I sit here  
2 today, I may have reviewed an article at some point which  
3 addressed that question.  
4 Q But you did not include any analysis of that factor in  
5 your report in terms of what shape Mr. Allen's aneurysm may have  
6 been or whether it would have had a higher risk of rebleeding or  
7 not?  
8 A That's correct.  
9 Q And the same question with regard to the shape of the  
10 aneurysm and the possible surgical treatment of that aneurysm,  
11 did you do any assessment of whether the shape of the aneurysm  
12 might affect the type of surgery or the complication of the  
13 surgery?  
14 A No.  
15 Q Does the location of the patient have any predictive  
16 factor for his outcome? And by "location" I mean where they are  
17 when they're diagnosed.  
18 A You mean -- what do you mean? Can you be more  
19 specific?  
20 Q Like give you a specific example. Would you expect  
21 there to be any difference in the outcome of a patient who walks  
22 into the Cedar Sinal Medical Center in Los Angeles and is  
23 diagnosed there in a major teaching hospital that may have a  
24 specialty center that deals specifically with aneurysms right  
25 there on the premises as opposed to someone who walks into a

Page 80

1 Native Health Center out in Bush, Alaska where they don't have  
2 any surgeons or any diagnostic equipment, do you expect that  
3 extreme difference in location to have any predictive effect on  
4 the outcome of those patients?  
5 A Now, you're talking about a place that has no CT scans,  
6 no nothing. It is just a tent or something like that?  
7 Q I admittedly used an extreme example, because you have  
8 to start at the extreme and see where it goes from there. But I  
9 am trying to get a sense whether location matters. Does location  
10 matter? Would it be common sense to expect that someone who  
11 walks into a major medical center where they have all of the  
12 modern technology available and all the specialists on staff are  
13 readily available is likely to have a better result than someone  
14 who doesn't, who walks into a less capable facility or who walks  
15 into a facility that may be miles from a center that could treat  
16 his condition. Would that be a factor that would be predictive  
17 of outcome?  
18 A The answer has to be it depends. Let's take the  
19 extreme case where it is basically a tent and there is no  
20 diagnostic facility but there is a bush plane there and there is  
21 somebody there with some sense and they say, "Holy smokes, this  
22 looks like a subarachnoid hemorrhage." Get him on the plane and  
23 get him to the this major center, which is only an hour away or  
24 what have you and they get there very quickly. And so it is  
25 going to depend on how quickly they can be gotten to a facility

Page 81

21 (Pages 78 to 81)

**A0039F7**  
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1 that can handle it.  
2 **Q And let me bring that then to -- so time to treatment**  
3 **might be a factor in predicting outcome?**  
4 **A That's correct.**  
5 **Q In this case --**  
6 **A How are you defining "treatment". I mean if you mean**  
7 **time of surgery or do you mean times to like stabilizing the**  
8 **patient. We should be clear about that.**  
9 **Q It could be either. I'm just trying to get a sense of**  
10 **the general outlines first and then we can talk about specifics.**  
11 **Did you take into account any assessment of the fact that**  
12 **Mr. Allen, for example, if he needed surgical treatment, might**  
13 **have to go down to Seattle to get that surgical treatment. Was**  
14 **that a factor that you considered in your assessment of the**  
15 **likelihood of his having a good outcome?**  
16 **A No.**  
17 **Q I apologize. I'm looking through my notes trying to**  
18 **skip over some questions.**  
19 **A That is quite all right.**  
20 **Q You refer to -- you were looking at the patients in**  
21 **that study who were diagnosed with subarachnoid hemorrhage, who**  
22 **presented with clinical Grades 1 or 2, and based on that factor,**  
23 **that they presented at admission clinical Grade 1 or 2, your**  
24 **conclusion is that a figure of 91 percent survival would apply to**  
25 **Mr. Allen --**

Page 82

1 study shows a significant and clinically useful relationship  
2 between a factor in outcome. And a study can show that and show  
3 that in a way that is completely valid and still not give me  
4 enough information to generate a probability. It is a question  
5 of how much information is provided in a study.  
6 If they tell me I did -- they did certain  
7 analyses and they know the analyses are valid and they  
8 report the P values and I know they're valid, and they give  
9 me some idea of the strength of the prediction then that  
10 will convince me that that is a factor that is important.  
11 But if they don't break it down -- break down the data or  
12 present the data completely enough, I will be unable to get  
13 the information I need in order to generate the probability  
14 estimate. Just showing that there is a relationship or  
15 stating that there is a relationship doesn't necessarily  
16 give me the information that I need to actually come up with  
17 a probability estimate. That was the problem because there  
18 were a great many studies that shows that those factors were  
19 important, but they didn't give me the information I needed  
20 to generate the probability estimate. That is the reason  
21 for the difference.  
22 **Q Did you cite any of those studies in your report?**  
23 **A Let's see the age, absolutely. That shows up again and**  
24 **again. Excellent physical condition that shows up with some of**  
25 **the articles as well. The third one, I don't have any references**

Page 84

1 **A Yes, assuming he had been correctly diagnosed. That**  
2 **91 percent is only for correctly diagnosed patients. If they are**  
3 **incorrectly diagnosed, it drops to 53 percent.**  
4 **Q But again, when you say -- I just want to make sure**  
5 **that I understood the reference to the -- presented with clinical**  
6 **Grades 1 or 2. I don't want to go back through all the**  
7 **testimony, but that means the presentation as they walked in the**  
8 **door?**  
9 **A Correct.**  
10 **Q Then below that you refer to the three additional**  
11 **factors that you think might even make it more likely that**  
12 **Mr. Allen would have had a good outcome. Do you see that?**  
13 **A Yes.**  
14 **Q And I read through those factors, but then on the next**  
15 **page you state, "I am not aware of any study with sufficient**  
16 **information to allow these additional prognostic characteristics**  
17 **to be taken into account in calculating Mr. Allen's probability**  
18 **of survival with independent function?**  
19 **A Correct.**  
20 **Q So there are no studies to support the affect of these**  
21 **additional factors?**  
22 **A That's incorrect.**  
23 **Q Well, I guess what you mean is that they don't have**  
24 **sufficient information to allow them to be taken into account?**  
25 **A Okay. There are two issues here. One is whether a**

Page 83

1 for. I can get them for you, if I -- if you want them, but that  
2 is one that we typically can't get enough data to generate a  
3 probability estimate. So I didn't even bother to include the  
4 references. So that is something that is well-known to the point  
5 of being just sort of common sense.  
6 **Q But you don't have enough information to come up with a**  
7 **numerical calculation that you could use for predicting survival?**  
8 **A Correct. Was the answer clear, because it is an**  
9 **important distinction.**  
10 **Q I understand. You said that you looked at articles**  
11 **that talked about some of these factors, but they didn't have**  
12 **enough information for you to do a statistical analysis?**  
13 **A Well, what I am saying is the articles carried out the**  
14 **statistical analysis, they presented results that were valid that**  
15 **showed that these were factors that were important, but they data**  
16 **didn't present enough of the data to allow me to do my**  
17 **calculations and come with the numbers that we need. It is an**  
18 **important distinction.**  
19 **Q And you don't have any personal knowledge in terms of**  
20 **your working with patients to be able to say you have dealt with**  
21 **patients who have had subarachnoid hemorrhage and you know what**  
22 **their long-term survival is and what their outcome was? So this**  
23 **isn't based on your personal knowledge. It is all based on these**  
24 **articles that you looked at?**  
25 **A That's correct.**

Page 85

22 (Pages 82 to 85)